What is claimed is:

1.   A method for producing a protected stream of compressed video content, said method comprising:

5   receiving an input stream of compressed video content containing a sequence of frames;

creating a set of encrypted frames by encrypting at least selected portions of selected frames of said sequence of frames in accordance with a frame encryption function;

10   generating frame decryption information necessary to decrypt said set of encrypted frames; and

assembling said protected stream using at least said set of encrypted frames and said frame decryption information.

15   2.   The method of claim 1 wherein said assembling further includes using unencrypted frames of said sequence of frames, said frame decryption information being synchronized with said set of encrypted frames.

3.   The method of claim 2 wherein said frame decryption information includes

20   encryption status information corresponding to each frame of said protected stream.

4.   The method of claim 2 wherein said frame decryption information includes decryption key information corresponding to encrypted frames within said protected stream.

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5.   The method of claim 2 wherein said frame decryption information includes intra-frame encryption offset information corresponding to each encrypted frame of said protected stream.

6. The method of claim 2 wherein said frame decryption information includes information identifying a data field size to be decrypted with respect to each encrypted frame of said protected stream.

7. The method of claim 1 further including encrypting a first consecutive number of said selected frames using a first frame encryption key and encrypting a second consecutive number of said selected frames using a second frame encryption key.

8. The method of claim 1 wherein said assembling includes synchronizing said frame decryption information with said set of encrypted frames.

9. The method of claim 5 further including parsing said input stream in order to determine frame boundaries and frame types associated with frames of said sequence of frames.

10. The method of claim 9 further including maintaining counts corresponding to each of said frame types, said counts and said boundaries being used to determine said intra-frame encryption offset information.

11. The method of claim 9 further including maintaining counts corresponding to each of said frame types, said counts being used to determine when to generate new encryption keys used in said of encrypting of said selected frames.

12. The method of claim 10 wherein said parsing further includes determining sizes of said frames of said sequence of frames, said sizes also being used in determining said intra-frame offset information.

13. The method of claim 1 further including determining a number of bytes to be encrypted within each of said selected frames based upon a level of available processing power and a desired degradation of visual quality.

14.   A method for decrypting compressed video content comprising:

receiving an input stream of compressed video content containing encrypted frames and unencrypted frames;

receiving frame decryption information necessary to decrypt said encrypted

5   frames, said frame decryption information distinguishing said encrypted frames from said unencrypted frames; and

decrypting said encrypted frames in accordance with said frame decryption information.

10   15.   The method of claim 14 wherein said input stream and said frame decryption information collectively comprise a protected video stream, said frame decryption information being synchronized with said encrypted frames within said input stream.

16.   The method of claim 14 wherein said frame decryption information includes

15   encryption status information corresponding to each of said encrypted frames.

17.   The method of claim 14 wherein said frame decryption information includes decryption key information corresponding to each of said encrypted frames

20   18.   The method of claim 14 wherein said frame decryption information includes intra-frame encryption offset information corresponding to each of said encrypted frames.

19.   The method of claim 14 wherein said frame decryption information includes size information identifying a data field size to be decrypted with respect to each of said

25   encrypted frames.

20.   The method of claim 14 wherein said decrypting includes decrypting a first consecutive number of said encrypted frames using a first frame decryption key and decrypting a second consecutive number of said encrypted frames using a second frame

30   decryption key.

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21.   An encrypting digital video encoder comprising:

a video processing unit for generating a plurality of input data streams in response to a sequence of uncompressed video frames;

an entropy compression unit for creating, based upon said plurality of input data

5   streams, compressed video content containing a sequence of compressed frames; and

a video encryption module configured to transform said sequence of compressed frames into a protected video stream containing at least a set of encrypted frames and frame decryption information necessary to decrypt said set of encrypted frames.

10   22.   The encoder of claim 21 wherein said protected video stream is comprised of an encrypted video stream including said set of encrypted frames and unencrypted ones of said compressed frames, said frame decryption information being synchronized with said encrypted video stream.

15   23.   The encoder of claim 22 wherein said frame decryption information includes encryption status information corresponding to each frame of said encrypted video stream.

24.   The encoder of claim 22 wherein said frame decryption information includes

20   decryption key information, intra-frame encryption offset information, and data field size decryption information corresponding to each frame of said encrypted video stream.

25.   The encoder of claim 21 wherein said video encryption module is operative to parse said sequence of frames in order to determine frame boundaries and frame types

25   associated with individual frames of said sequence of frames.

26.   The encoder of claim 25 wherein said video encryption module is operative to maintain counts corresponding to each of said frame types, said counts and said boundaries being used to determine intra-frame encryption offset information.

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27.   The encoder of claim 25 wherein said video encryption module is operative to maintain counts corresponding to each of said frame types, said counts being used to determine when to create new encryption keys used in generating ones of said encrypted frames.

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28.   An decrypting digital video decoder comprising:

a video decryption module configured to receive a protected input stream of compressed video content containing at least a set of encrypted frames and frame decryption information, said frame decryption information being necessary for decrypting

10   said set of encrypted frames so as to form a set of decrypted frames;

an entropy decompression unit for creating, based at least in part upon said set of decrypted frames, a plurality of video data streams; and

a video processing unit for generating an output stream of uncompressed video content in response to said plurality of video data streams.

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29.   The decoder of claim 28 wherein said protected input stream is comprised of an encrypted video stream including said set of encrypted frames and unencrypted frames, said frame decryption information being synchronized with said encrypted video stream.

20   30.   The decoder of claim 29 wherein said frame decryption information includes encryption status information corresponding to each frame of said encrypted video stream.

31.   The decoder of claim 29 wherein said frame decryption information includes
25   decryption key information, intra-frame encryption offset information, and data field size decryption information corresponding to each frame of said encrypted video stream.